

**REMARKS**

**I. STATUS OF THE CLAIMS**

In accordance with the foregoing, claims 1-18 are amended and claims 19-21 are added. Claims 1-21 are currently pending and reconsideration is respectfully requested.

No new matter has been added.

The Examiner's rejections are respectfully traversed.

**II. REJECTION OF CLAIMS 1-18 UNDER 35 U.S.C. 112, SECOND PARAGRAPH, FOR INDEFINATENESS**

In accordance with the foregoing, the claims are amended, responsive to the objections and helpful suggestions of the Examiner, and it is respectfully submitted that the rejection of claims 1-18 is overcome, and accordingly, should be withdrawn.

**III. REJECTION OF CLAIMS 1-3, 7-11 AND 15-17 UNDER 35 U.S.C. 102(e) AS BEING ANTICIPATED BY SHIOMI ET AL. (USP 7,024,668), HEREINAFTER REFERRED TO AS "SHIOMI."**

Independent claims 1, 9 and 17 are allegedly anticipated by Shiomi.

Shiomi discloses a Computer system having a hardware 35 (CPU, memory, keyboard and display), OS unit 34 including a kernel 34a and library unit 34b, Java Middleware unit 33 and application unit 11 and 12 (see column 14, lines 12-20 and fig. 15). VM unit 33a in the Java middle 33 analyzes application 12 from host, selects library and control the hardware 35. In other words, the VM unit 33a interprets application ID to designate a class of the library, calls a class library 33c and the designated library executes the class to control hardware.

However, Shiomi fails to disclose, either expressly or inherently, the claimed "a parameter file storing parameters to convert said first transaction control signals, which are a common type to all apparatus connected to said host and specified by an interface with said host, into second transaction control signals specific to said middleware layer," as recited, for example, in claim 1. In other words, Shiomi fails to disclose, either expressly or inherently an automatic financial transaction apparatus and parameter file to convert first common transaction control signals to second transaction control signals specific to the middleware of the apparatus.

The Examiner broadly interprets an automatic transaction apparatus and transaction signal, asserting that Shiomi, at column 7, lines 39-44, and element 11 of Fig. 15 discusses the

same. Applicants respectfully disagree with the Examiner's assertion, because Shiomi, at column 7, lines 39-44 merely discusses:

The application inputting unit 11 is made up of a floppy disk drive, a CD drive, a network interface board, a broadcast receiver, or the like. The application inputting unit 11 receives applications to be executed, and stores the applications into the application storing unit 12.

The application storing unit 12 is made up of an RAM, an ROM, a hard disk, a CD ROM drive, a floppy disk, or the like. The application storing unit 12 stores the applications outputted from the application inputting unit 11, or applications retained beforehand.

In other words, element 11 of Figure 15 of Shiomi merely discusses a computer system and control signal.

Accordingly, claim 1 is amended for clarity to recite, in part, "said middleware layer specific to said apparatus controls said I/O units **so as to perform a financial transaction** operation designated by said first transaction signals, according to said second transaction signals." In other words, claim 1 is amended to clarify that, in one embodiment, an automatic transaction apparatus performs a financial transaction and the first and second transaction control signals indicate financial transaction control signals. Applicants respectfully submit that Shiomi fails to disclose or suggest the claimed "said middleware layer specific to said apparatus controls said I/O units **so as to perform a financial transaction** operation designated by said first transaction signals, according to said second transaction signals," as recited, for example, in claim 1, because Shiomi merely discusses a computer system and control signal.

Furthermore, amended claim 1 provides "a parameter file storing parameters to convert said **first transaction control signals, which are a common type to all apparatus connected to said host and specified by an interface with said host**, into second transaction control signals specific to said middleware layer." In other words, in one embodiment, a first transaction control signals, which is a common type to all apparatus connected to said host and specified by an interface with said host into second transaction, controls signals specific to said middleware layer. Applicants respectfully submit the Shiomi fails to disclose, either expressly or inherently, the same.

Claim 1 is further amended to provide "an I/O control layer converting said first transaction control signals, into said second transaction control signals specific to said middleware layer by referring to said parameter file, and operating said middleware layer based on said second transaction signals." In other words, according to one embodiment of the

present invention, the middleware layer specific to said apparatus controls said I/O units so as to perform financial transaction operation designated by said first transaction signals, according to said second transaction signals. Applicants respectfully submit the Shiomi fails to disclose, either expressly or inherently, the same.

Independent claim 9 provides an automatic transaction control method, including:

referring to a parameter file storing parameters to convert said first transaction control signals, which are a common type to all apparatus connected to said host and specified by the interface with said host, into second transaction control signals specific to said middleware layer, converting said first transaction control signals sent from said host into said second transaction control signals specific to said middleware layer, and operating said middleware layer by said second transaction control signals,

wherein said controlling comprises controlling said I/O units so as to perform a financial transaction operation designated by said first transaction signals, by said middleware layer specific to said apparatus operated according to said second transaction signals

Accordingly, Applicants respectfully submit that claim 9 patentably distinguishes over the cited prior art.

Independent claim 17 provides a computer-readable medium storing a control program of an automatic transaction apparatus, including:

referring to a parameter file which stores parameters converting said first transaction control signals, which are a common type to all apparatus connected to said host and specified by the interface with said host, into said second transaction control signals specific to a middleware layer to control a plurality of I/O units to perform said transaction operation, convert said first transaction control signals, sent from said host, into said second transaction control signals unique to said middleware layer, and operate said middleware layer; and

controlling said I/O units so as to perform a financial transaction operation designated by said first transaction signals, by said middleware layer specific to said apparatus operated according to said second transaction signals

Accordingly, Applicants respectfully submit that claim 17 patentably distinguishes over the cited prior art.

Dependent claims recite patentably distinguishing features of their own or are at least patentably distinguishing due to their dependence from the independent claims. Withdrawal of the rejection of pending claims, and allowance of pending claims is respectfully requested.

**IV. REJECTION OF CLAIMS 4, 5, 12 AND 13 UNDER 35 U.S.C 103(a) AS BEING UNPATENTABLE OVER SHIOMI, IN VIEW OF EVANS ET AL. (USP NO. 2004/0131082), HEREINAFTER REFERRED TO AS "EVENS."**

The Office Action asserts that Evans at paragraphs 4 and 6 and Figures 2 and 3 discloses the claimed "wherein said plurality of I/O units **implement cash transactions** based on said operation of the customer," as recited, for example, in claim 4. Applicants respectfully disagree with the Examiner's assertion, because Evans, at paragraphs 4 and 6 recite, respectively:

In order to meet the computing needs of a typical enterprise, it is necessary to operate numerous distinct computing platforms simultaneously. Spread over these various platforms, separate business software applications together handle the data processing needs of the enterprise. For example, in a retail company, separate business applications may handle merchandising, supply chain, and order management. Although these business applications and computer platforms are not generally designed to communicate with one another, it has long been recognized that some inter-program communication is required for an efficiently operating computing environment.

...

It is necessary, however, to make sure that each business application is able to send and receive messages through the middleware transport layer. This is accomplished through the use of adapters that operate between the application programs and the middleware transport layer. The adapters convert communications emanating from the application into the messages understood by the middleware transport layer, and vice versa. In doing so, the adapters either communicate with the application program directly through the program's application program interface (or API), or are capable of extracting data from a file or database created and maintained by the application program.

Accordingly, Applicants respectfully submit that Evans fails to disclose or suggest the claimed "wherein said plurality of I/O units **implement cash transactions** based on said operation of the customer," as recited, for example, in claim 4, as asserted by the Examiner, because Evans fails to disclose or suggest implementing a "cash transactions." Furthermore, Applicants respectfully submit that Evans fails to correct the deficiencies of Shiomi.

Accordingly, Applicants respectfully submit that the dependent claims recite patentably distinguishing features of their own or are at least patentably distinguishing due to their dependence from the independent claims. Withdrawal of the rejection of pending claims, and allowance of pending claims is respectfully requested.

**V. REJECTION OF CLAIMS 6 AND 14 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER SHIOMI IN VIEW OF APPLICANT'S ADMITTED PRIOR ART (HEREINAFTER AAPA)**

The AAPA merely discusses a Web ATM having a browser to communicate with a remote host. Accordingly, Applicants respectfully submit the AAPA fails to disclose or suggest the claimed "wherein said control unit further comprises a browser communicating with said host on the Web and exchanging said first control signals specified by the interface between said I/O control layer and said host," as recited in claim 6, and the claimed "wherein said receiving step comprises communicating with said host on the Web and exchanging said first transaction control signals specified by the interface with said host," as recited in claim 14. Furthermore, Applicants respectfully submit that the AAPA fails to correct the deficiencies of Shiomi.

Accordingly, Applicants respectfully submit that the dependent claims recite patentably distinguishing features of their own or are at least patentably distinguishing due to their dependence from the independent claims. Withdrawal of the rejection of pending claims, and allowance of pending claims is respectfully requested.

**VI. NEW CLAIMS**

New dependent claims 19 and 20 recite patentably distinguishing features of their own or are at least patentably distinguishing due to their dependence from independent claim 1.

New claim 21 relates to a method for controlling a financial transaction operation, which includes:

- receiving, from a financial transaction apparatus, a first transaction control signal for said financial transaction operation;
- converting said first transaction control signal into a second transaction control signal specific to a middleware layer; and
- controlling said financial transaction apparatus to perform said financial transaction operating in said middleware layer using said second transaction control signal.

Accordingly, Applicants respectfully submit that claim 21 patentably distinguishes over the cited prior art.

**VII. CONCLUSION**

In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.


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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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